

Two Species of *Aturus* (Aturidae, Acari) from Japan*

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In the autumn of 1954, I collected many water-mites (Hydrachnellae) from a streaming pool (water temperature, 9.0°C, and pH, 7.0) at the Okunikko Trout Hatchery in Tochigi Prefecture. Among the specimens, I found two species of *Aturus*, one of which will be new to science and the other is a North American species as described below.

Aturus (*Subaturus*) *nikkoensis* n. sp.

Male. Body almost pentagonal in dorsal view, 322 μ long in dorsum and 277 μ wide. Middle portion of the anterior body margin caved in a little. Posterior portion of body narrower than the anterior. Posterior margin of body almost straight and with four hyaline lobes on each side of the genital cleft. Postero-lateral portions of dorsum with many minute hairs. Four pairs of circular glandularia arranged near at the lateral margins of dorsum. Eyes prominent, reddish black in color and the interval is 105 μ . Maxillary bay 83 μ long and 75 μ wide. Maxillary organ 76 μ long and 55 μ wide. Mandibles 105 μ long, including a claw in each. Features of palps as shown in Fig. 1, d. Dimensions of palps:

Segment	I	II	III	IV	V
Dorsal surface	21	51	37	74	43
Dorso-ventral height	20	47	31	29	14 μ

Fourth legs having several sword-shaped bristles, one of which is very stout and peculiar in shape, in the fourth and fifth segments as in Fig. 1, f. Fourth and fifth segments of the third legs with many slender hairs as in Fig. 1, e. Genital acetabulae arranged along the postero-lateral margins in venter as in Fig. 1, a. Numbers of the genital acetabulae:

Preparat number	1378	1382	1383	1384
Right side	8	8	6	7
Left side	8	8	6	7

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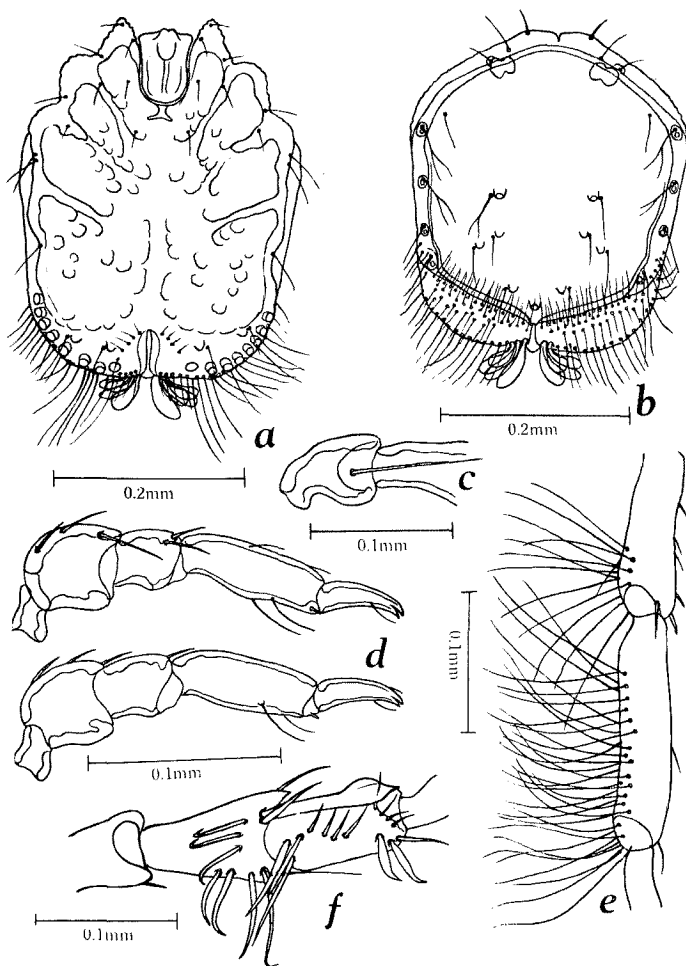


Fig. 1 *Aturus (Subaturus) nikkoensis* n. sp., ♂. a. venter ; b. dorsum ; c, 1st-2nd segments of left IVth leg ; d, palps ; e, 4th-5th segments of left IIIrd leg ; f, 3rd-6th segments of left IVth leg.

Anus located on dorsal shield near at the posterior margin. Body color red.

Female. Body almost oval in outline, 360μ long in dorsum and 307μ wide. Interval between eyes 105μ . Maxillary organ 75μ long and 60μ wide. Mandibles 25μ high and 108μ long, including each a claw. Palps :

Segment	I	II	III	IV	V
Dorsal surface	22	50	31	74	45
Dorso-ventral height	19	45	31	28	15 μ

Genital plates each 105 μ long. Numbers of the genital acetabulae:

Preparat number	1385	1386	1387	1389
Right side	8	8	7	8
Left side	9	8	7	8

Body color same as that of the male.

Type-locality. Four males and five females were captured on Oct. 8, 1954 in a pool at the Okunikko Trout Hatchery in Tochigi Prefecture.

Type-specimens. Holotype, Prep. No. 1378, ♂; Allotype, Prep. No. 1386, ♀; Paratypes, Prep. Nos. 1382, 1383, 1384, ♂♂; 1385, 1387, 1388, 1389, ♀♀. All

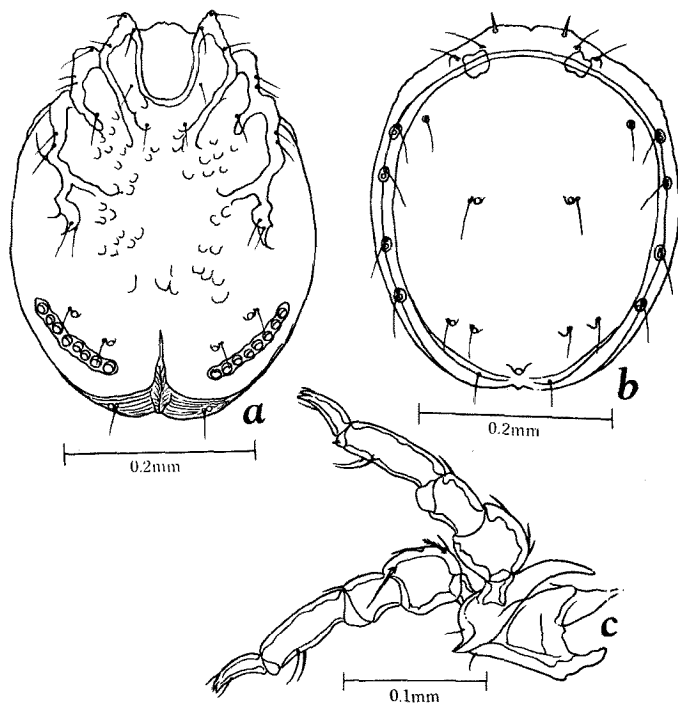


Fig. 2 *Aturus (Subaturus) nikkoensis* n. sp., ♀. a, venter; b, dorsum; c, palps attached to maxillary organ.

preserved in the collection of the Biological Institute, Ibaraki University.

Remarks. Though this new species resembles *A. convergens* Walter, *A. natalensis* Protz, *A. montanus* Habeeb and *A. uchidai* Imamura, it is easily distinguished from them by the body form and the bristles on the fourth legs.

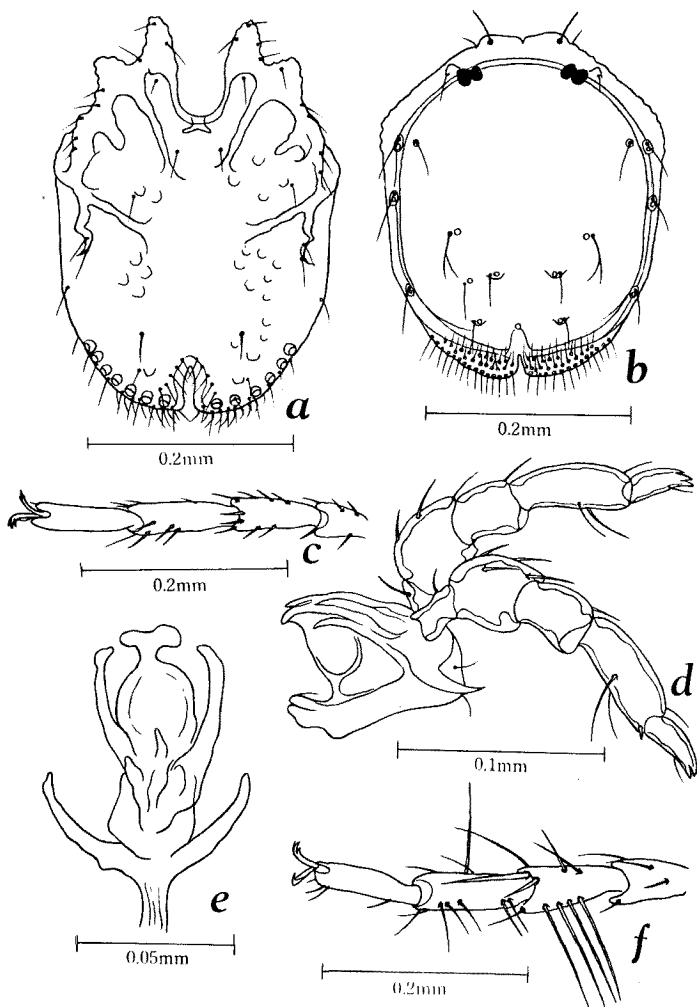


Fig. 3 *Aturus (Subaturus) semilineatus*, ♂. a, venter; b, dorsum; c, 3rd-6th segments of right IIIrd leg; d, palps attached to maxillary organ; e, penis; f, 3rd-6th segments of right IVth leg.

***Aturus (Subaturus) semilineatus* Habeeb**

Male. Body oval in outline, 334μ long in dorsum and 272μ wide. Interval between eyes 107μ . Posterior marginal portion of dorsum with many minute hairs. Maxillary organ 76μ long and 51μ wide. Palps as shown in Fig. 3, d and the dimensions:

Segment	I	II	III	IV	V
Dorsal surface	22	46	31	59	32
Dorso-ventral height	17	37	26	22	12μ

Features of the third and fourth legs as in Fig. 3, c & f. Genital acetabulae counted seven in right side and six in the left. Genital cleft 44μ in length. Caudal appendages absent. Body color red.

Locality. One male was collected on Oct. 8, 1954 in a streaming pool of the Okunikko Trout Hatchery, Tochigi Prefecture.

Distribution. Canada and USA.

Remarks. The Japanese specimen is a little larger than the North American species, and there are a little differences in their body shapes and the bristles on the fourth and fifth segments of fourth legs between Japanese and the North American species. But those minute differences seem not to be sufficient to build a new species or subspecies. It is very interesting that the North American species is also found in a cold stream water (9.0°C) in Japan. The female is not yet found.

Literature

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